

REMARKS

The application has been amended at this time to put it into condition for allowance.

Claim 17 has been cancelled without prejudice. Claim 25 is new and reads on an elected species. No new matter is entered by way of this amendment.

ELECTION OF SPECIES

Applicant affirms that in response to the previous Species Election Requirement, Applicants provisionally elected, with traverse, species 2 for Category A, species 1 for Category B, and species 2 for Category C, as the elected species for examination on the merits. Applicants further elected the compound of MgF_2 of species 2 for Category A as the species for examination on the merits. It was submitted that at least claims 1-24 are readable thereon.

It is noted that claims 3, 6, 10, 12-13, 18 and 20 are withdrawn from consideration as being drawn to a non-elected species.

Applicant now elects species 2A compound MgF_2 for Category A, species 1B for Category B, and species 2C for Category C, as the elected species for examination on the merits. It was submitted that at least claims 1-2, 4, 5, 7-9, 11, 14-16, 19, and 21-25 are readable thereon.

REJECTIONS

I. Claim 9 stands rejected under 35 U.S.C 112, second paragraph as being indefinite. That claim has been amended to avoid the alleged indefiniteness. Specifically, the layer claimed is now referred to as the temporary adhesion enhancing layer. Withdrawal of the rejection is solicited.

II. Claims 1-2, 7-9, 11, 14-17, 19 and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Souel et al. U.S. patent 6,281,468 in view of Medwick et al.

Claim 1 has been amended to clarify the invention by reciting that the temporary layer is an adhesion enhancing layer for enhancing adhesion of the face of the lens with a lens retaining shoe when trimming the lens. Indeed, the originally claimed protection layer has a primarily adhesion enhancing function and does more than merely protect the underlying coating or lens substrate.

Souel et al. is indeed the closest prior art in that it discloses a method for marking the face of an ophthalmic lens where a low surface energy hydrophobic lens overlies a higher surface energy coating or the lens substrate and a mask of having a configuration complementary to a required mark is disposed between the face of the lens to be marked and the energizing source which may be in the form of a corona discharge so that the energizing source selectively eliminates the outermost low surface energy layer to reveal the underlying coating or the

substrate. The examiner notes that Souel et al. does not teach a temporary protection layer having a surface energy higher than the outermost layer and a thickness less than 5 nm to enable the discharge to act on the outermost layer through the temporary layer.

The Examiner contents that Medwick et al. teaches a removable coating for glass substrate having functional coatings to protect the substrate from the mechanical and/or chemical damage. Further, it is asserted that since Medwick et al. teaches that the removable coating is preferably no more than 2 micrometers, but that the exact thickness thereof is selected for a particular application based on the degree of protection desired (noting page 5-6, paragraph [0044]).

The Examiner concludes it would have been obvious to modify the thickness of the protective coating of Medwick et al. "during routine experimentation" to determine an optimal coating thickness for whatever processing step the glass substrate is to be subjected to.

It is pointed out that the teachings of Medwick et al. cannot be applied to the teachings of Souel et al. without recourse to hindsight and in any event such a combination would not teach or suggest the claimed invention.

First and foremost neither document is directed to providing an adhesion enhancing film for enhancing the adhesion

between a lens and a retaining shoe for use when trimming the lens.

While Souel et al. is directed to the field of the invention and discloses a method with drawbacks that the present invention overcomes Medwick et al is concerned with the entirely different technology namely that of large glass substrates having dimensions generally greater than 4 feet x 6 feet which are shipped to fabricators to be cut into smaller pieces and incorporated into production articles such as architectural windows, automotive transparencies, insulated glass units, mirrors and the like. These large dimensional substrates are typically purchased and shipped in bulk and may be bundled together and shipped on a wooden pallet in a conventional manner. When shipping such substrates with functional coatings or substrates of different sizes, a high spot or corner of one substrate may contact the surface, e.g., the functionally coated surface, of the adjacent substrate during handling processing shipping for storage and might damage the functional coating or scratch the adjacent substrate surface.

The invention of Medwick et al. is directed to a removable protective coating deposited over the substrate surface where protection is desired, such as protection from mechanical, chemical or handling damage. According to an aspect of the Medwick et al. teachings, the protective coating has a thickness of less than 50 microns.

More specifically, the protective coating can have a physical thickness of up to 1000 micrometers and preferably up to 250 micrometers and more preferably up to 25 micrometers even more preferably up to 10 micrometers and still even more preferably up to about 2 micrometers and "most preferably" between about 1 micrometer and 2 micrometers on the substrate surface.

Thus, the contention that Medwick et al. is preferably no more than 2 micrometers is a selective reading of that document in that there is no basis for a skilled person to contemplate thicknesses than the lowest thickness recited, namely 1 micrometer.

It should be borne in mind that such a thickness is considered necessary by Medwick et al. to ensure that these large dimensional substrates will not be damaged during shipping, handling and storage. Surely there is no suggestion or conceivable motivation for the person ordinary skilled in the art to consider thicknesses more than 2 orders of magnitude smaller than the smallest thickness contemplated by Medwick et al. Given the protection necessitated in the context of Medwick et al., one having ordinary skilled in the art could not have discovered that with a thickness of less than 5 nm (or 0.005 mm) that is, 1/500 of the smallest thickness (1 mm or 1,000 nm) disclosed in Medwick et al. a satisfactory result could be obtained.

Moreover, there is no suggestion in either Souel et al. or Medwick et al. of providing an adhesion enhancing layer on the outermost surface of an ophthalmic lens having a thickness of no greater than 5 nm in order that to ensure proper level of adhesion during trimming while at the same time enable the energizing source to eliminate selectively the outermost layer on the substrate to reveal the substrate or underlying high energy coating.

The contention that the resulting protective coating from the combination of teachings of Souel et al. and Medwick et al. enable the discharge to act on the outermost layer through the temporary coating to be both less than 5 nm and capable of allowing the energizing source to act on the outermost layer is based on pure hindsight and fails to take into account that the removable coating enhances adhesion between the lens and a retaining shoe nowhere found in either reference asserted.

As regards the contention that the claimed thickness 5 nm is an optimization obtained through routine experimentation, this contention is clearly at odds with the discussion of the optimization of ranges at MPEP § 2144.05. In this respect, it is submitted that the claimed upper limit of 5 nm is critical in that it provides enhanced adhesion to perform trimming with a retaining shoe and at the same time allows the energizing source to act on the outermost surface of the lens and that it is more

than 2 orders of magnitude smaller than the smallest thickness indicated in the asserted prior art document Medwick et al.

Claims dependent directly or indirectly from claim 1 are therefore patentable over the prior art for the reasons developed above in connection with claim 1.

Claim 25 is a new independent claim directed to a method substantially the same method as claim 1 and in addition recites selectively eliminating the outermost layer through the temporary protection layer by action of the energizing source, and removing the adhesion enhancing layer from the ophthalmic lens after the temporary adhesion enhancing layer has been selectively eliminated from the lens to produce the desired mark and after the ophthalmic lens has been trimmed to the desired contour. It is believed to be patentable for the same reasons as claim 1 and further by reason of the additional features recited.

III. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being patentable over Souel et al. in view of Medwick et al. and in further view of MacNutt U.S. patent 2,536,075.

As MacNutt is directed to a method of removing baked magnesium fluoride films from optical glass and relied on that teaching, it does not impact the unfounded rejection of claim 1, inter alia, based on a combination of Souel et al. and Medwick et al.

IV. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Souel et al. in view of Medwick et al. and in further view of Kimock et al. U.S. 5, 190,807.

Kimock et al. directed to a method for improving the adhesion of the hard coating to an optically transparent polymeric substrate cannot justify the unfounded combination of Souel et al. and Medwick et al. as asserted against claim 1.

Entry of the above amendments is earnestly solicited. An early and favorable notice of acceptance is earnestly requested.

Should there be any matters that need to be resolved in the present application; the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17. Respectfully submitted,

Respectfully submitted,

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